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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/830,686      | 08/03/2001  | Keiji Yano           | 027650-928          | 9925             |

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EXAMINER

DURAND, PAUL R

ART UNIT PAPER NUMBER

3721

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/830,686

Applicant(s)

YANO, KEIJI

Examiner

Paul Durand

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/03 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-11,14-17,20-24,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler (US 5,231,817) in view of Fielibert (US 3,679,509) in further view of Condo et al (US 3,381,441).

In regard to claims 9,16 and 22, Sadler discloses the invention substantially as claimed including a heat sealing device as part of a vertical form and fill machine, comprised of a operation jaw 30, with a flat surface, facing the seal zone, a counter jaw 31, comprised of a curved surface 56, facing the seal zone, that transversely seals a package 99 filled with a liquid, the seal jaws 30 and 31 being able to collapse the tube

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and remove the air from the pouch before sealing (see Figs. 1, 2a, 2b, Abstract, C3, L8-27 and C4, L33-35). What Sadler does not disclose is the use of a curved operation surface that is in the seal zone and the specific sealing of the package while moving the liquid during sealing. However, Fielibert teaches that it is old and well known in the art of sealing packages to provide a sealing apparatus with a sealing head comprised of sealing members 9 and 11, comprised of flat sealing surface 10, chevron shaped surfaces 12 and 13, that faces and contacts the seal zone for the purpose of providing a sealed area that is free from contaminants (see Figs. 1, 2 and C3, L6-14). Furthermore, Condo teaches that it is old and well known in the art to provide a sealing machine with means for flatten the tube prior to sealing for the purpose of removing the liquid from the sealing area of a package (see C2, L10-18). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the flattening means as taught by Condo for the purpose of increasing sealing capability.

In regard to claims 10, 11, 17, 23 and 24, Sadler discloses the invention as claimed including a counter jaw 30 with a curved surface 56 that is in the form of a chevron

In regard to claims 15 and 28, Sadler discloses the invention as claimed including a resistance body 30 for forming a seal zone (see Figs. 2a, 2b). Furthermore, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

In regard to claims 14,20 and 27, Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is ultrasonic heating means for sealing packages. However Condo teaches that it is old and well known in the art to provide a sealing machine with an ultrasonic sealing device 19 with sealing member 20, heated by ultrasonic waves for the purpose of increasing manufacturing efficiency (see Figs. 1,5,8 and C3, L63-68). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the ultrasonic heating means for sealing packages as taught by Condo for the purpose of increasing manufacturing efficiency.

In regard to claims 15 and 27, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

4. Claims 12, 18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Fukuda (US 5,347,795).

Sadler discloses the invention substantially as claimed including sealing members 30 and 31. What Sadler does not disclose is a sealing member that is comprised of ridge formed at the operation surface. However, Fukuda teaches that it is old and well known in the art to provide transverse sealing members with sealing members 20 that are in the form of discontinued ridges for the purpose of increasing manufacturing efficiency (see Fig. 13). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with ridged

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sealing members as taught by Fukuda for the purpose of increasing manufacturing efficiency.

5. Claims 13, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Konno et al (US 5,787,690).

Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is inductance heating means for sealing packages. However Konno teaches that it is old and well known in the art to provide a sealing machine with a transverse sealing device 1 with sealing member 35 and 36, heated by inductor 19 for the purpose of increasing manufacturing efficiency (see Figs. 4-7 and C2, L20-29). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the inductance heating means for sealing packages as taught by Konno for the purpose of increasing manufacturing efficiency.

In regard to claims 13 and 26, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 8-29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wirsig et al, Hayashi et al and Anderson have been cited to show devices having similar structure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Paul Durand  
October 2, 2003



Rinaldi I. Rada  
Supervisory Patent Examiner  
Group 3700